



*World's Fastest H.264  
Streaming Solution*



# MGW Sprint

Sub One-Frame H.264 HD IPTV Encoder / Decoder Appliance



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## Sub One-Frame H.264 HD IPTV Encoder / Decoder Appliance

MGW Sprint is a professional-grade IPTV appliance running the world's fastest MPEG-4 H.264 HD codec. With 4 milliseconds for encoding and another 4 milliseconds for decoding - MGW Sprint units can stream Full HD 1080p video and audio, point to point or point to multipoint with less than one video frame of delay- practically matching the latency of hard-wired uncompressed video systems.

### **TurboVideo2™ - Full HD 4:2:2 H.264 zero-delay-codec**

MGW Sprint uses VITEC's revolutionary sub one-frame TurboVideo2™ technology for broadcasting H.264 IP streams in unicast or multicast, over wide range of network types, while maintaining superb video quality suitable for any video application. From encoding stationary HD cameras, through real-time distribution of imagery from high-resolution computer graphics applications, to motion-intensive broadcast and ISR video - TurboVideo2™ delivers crisp, details - rich video over IP in unprecedented speed and with no visually noticeable delay.

### **Compact Design Blends High-Performance IPTV Service with Versatile Form Factor**

Designed for both stationary applications and for the field, MGW Sprint Encoder and MGW Sprint Decoder appliances are compact, rugged, 100% silent units with no moving parts. The units are rated for extreme applications and provide the reliability needed for mission critical Full-Motion-Video and 365x24x7 IPTV services.

### **Secure, Intuitive Web Management Interface for Rapid Configuration and Control**

MGW Sprint Encoders and Decoders feature a user-friendly HTTP interface that enables easy management and control of the codec's over the local network or from remote. Designed for maximum performance and quick setup - the appliances auto-save last known configuration making it easy to rapidly start sending/receiving IP Video content anytime, anywhere using any video source.

#### **Benefits**

- World's fastest professional-grade H.264 HD Codec - IP Video with no visible delay
- Portable, fan-less, 100% silent enclosure - optimized for field use and for mounting in IT racks
- HD-SDI and HDMI encoding and decoding - up to Full HD 1920x1080
- 4:2:2 Encoding Mode for highest level of details - ideal for complex video content



## Applications

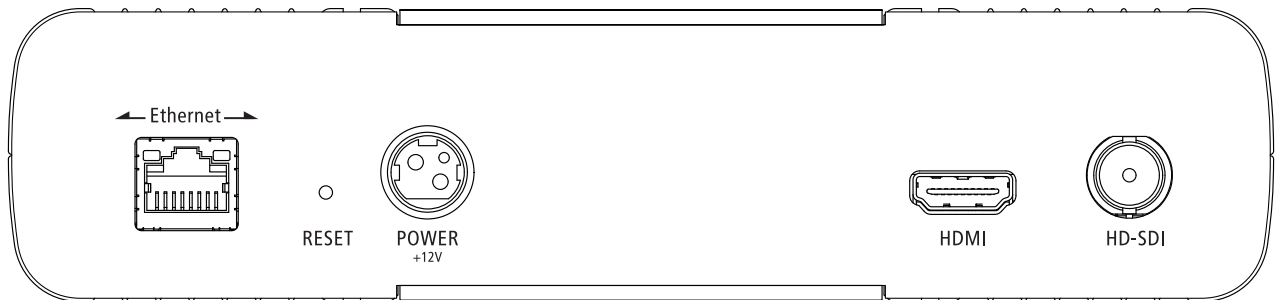
- Point-to-Point video contribution
- Military and Medical Simulation Video
- IP Broadcasting of high-res HDMI / DVI sources from computers and TV Tuners
- Digital Signage
- Hospitality
- Targeting, Monitoring and Tactical ISR
- Zero delay Video Tele-presence

## Key Features

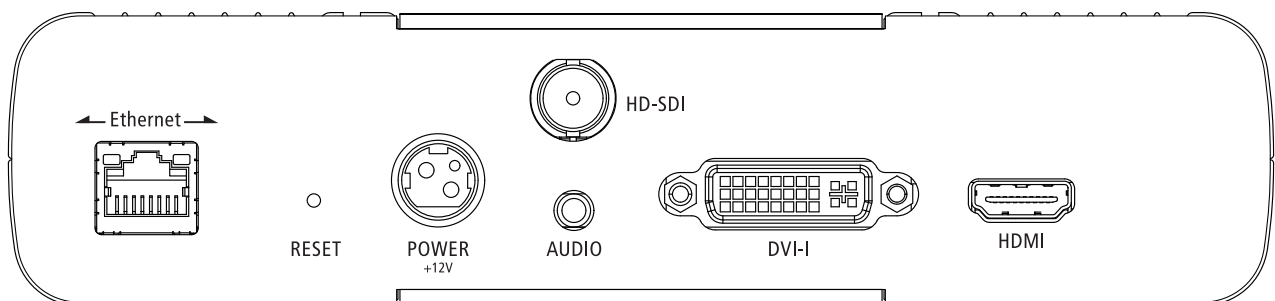
- 4 milliseconds encoding and decoding - TurboVideo2™ sub one-frame delay end-to-end
- HD-SDI, DVI and HDMI encoding inputs - validated with Cable and Satellite TV HDMI receivers
- Unique design with no moving parts simplifies installation and mounting options
- Session Announcement Protocol (SAP)
- Compatible with all major H.264 software/hardware decoders

## Rear Panel Interfaces

MGW Sprint Encoder



MGW Sprint Decoder



## Technical Specifications

### Video Format

- H.264 (ISO/IEC 14496-10 AVC MPEG-4 part 10). Modes:
  - Main Profile L3 and L4
  - High Profile L4 and L4.1
- Bit Rate: 5 Mbps - 40 Mbps
- Resolutions: Configurable up to Full HD 1920x1080p
- Frame Rate: 25-60 fps

### Audio Format

- Embedded audio, PCM stereo and mono modes
- Bit Rate: 48 Kbps - 196 Kbps

### I/O Interfaces - Encoder

- Input Resolutions:
  - 1024x768p50/60/75
  - 1280x800p50/60
  - 1366x768p50
  - 1280x720p25/29.97/30/50/59.94/60
  - 1920x1080p23.976/24/25/29.97/30
- Video Input:
  - 1 x 3G / HD-SDI
  - 1 x HDMI with support for HDCP / non-HDCP sources
- Audio Input:
  - Embedded audio via HD-SDI / SD-SDI
  - Embedded audio via HDMI
- Ethernet:
  - 1 x RJ45 10/100/1000 Mbps Base-T for streaming/management

### I/O Interfaces - Decoder

- Video Output:
  - 1 x 3G / HD-SDI / SD-SDI
  - 1 x HDMI with support for HDCP / non-HDCP sources
  - 1 x DVI-I
- Audio Output:
  - Embedded audio via HD-SDI / SD-SDI
  - Embedded audio via HDMI
- Ethernet:
  - 1 x RJ45 10/100/1000 Mbps Base-T for stream input/management

### Network Protocols

- Streaming:
  - RTP/RTCP unicast and multicast
- Peripheral:
  - HTTP, SAP, IGMP

### Management

- HTTP Web based remote management application
- Remote firmware and software upgrade capability

### Physical

- Enclosure: professional-grade rugged aluminum case, portable and rack-mount options
- Dimensions: 42.92mmH x 190mmW x 118mmD (1.69" H x 7.48" W x 4.64" D)
- Weight: Encoder 1.11 Kg (1.90 lbs), Decoder 1.05 Kg (2.31 lbs)
- Power Consumption: 9-12 VDC, max 15W
- Front LED's for power, network activity, streaming and video source indications
- Fan-less design with mounting holes for seamless installation in vehicles, 100% silent operation

### Environmental

- Operating Temperatures: 0° C to 50° C (32° F to 122° F)
- Relative Humidity: 5% to 95% (non-condensing)
- EMC Standards: FCC part 15 class B and CE
- Meets MIL-STD810F and MIL-STD461 specifications

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